

IN THE CLAIMS:

Please cancel claims 2 and 8 without prejudice.

In accordance with the Revised Rules under 37 C.F.R. 1.121, please amend the claims as shown below and indicated as “currently amended.” Also shown below are claims that may be original, cancelled, withdrawn, previously presented, new, and not entered.

1. (currently amended) A device for determining the sheet resistance of ~~samples, in particular~~ wafers and other two-dimensional objects having first and second surfaces, comprising a means for measuring the conductivity of a the sample according to the eddy current technique, wherein the sample is introducible into a gap between magnetic cores for measurement, and distance-measuring means for measuring the position of the sample in the gap for measurement, and computing means for determining the sheet resistance on the basis of the measured conductivity and of the position of the sample in the gap for measurement, wherein the distance-measuring means operate in a contactless manner by means of ultrasound, capacitive or optical techniques.

2. (cancelled) ~~The device according to claim 1, wherein the means for measuring the position of the sample comprises a distance measuring means which preferably operates in a contactless manner, in particular by means of ultrasound, capacitive or optical techniques.~~

3. (currently amended) The device according to claim 1, wherein the computing means comprises a memory in which a mathematical function is stored which is used in the calculation of the sheet resistance relative to the position of the sample in the gap for measurement.

4. (currently amended) The device according to claim 3, wherein coefficients of the a mathematical function are stored in the memory, said coefficients being ~~which are~~ specifically determined for the set-up of a device.

5. (currently amended) The device according to claim 1, wherein the means for measuring the position of the sample acquires the position of the sample at least at two locations, preferably adjacent to and ~~in particular~~ at both sides of the location of the measurement of the conductivity, wherein ~~preferably~~ a pair of sensors are arranged at each location.

6. (currently amended) The device according to claim 1, comprising means for determining the position of at least one of said first and second ~~the two~~ surfaces of a sample.

7. (currently amended) A method for determining the sheet resistance of ~~samples, in particular~~ wafers and other two-dimensional objects, comprising the steps of: measuring the conductivity of ~~a the~~ sample according to the eddy current technique, wherein the sample is introducible into a gap for measurement, and measuring the position of the sample in the gap for measurement and determining the sheet resistance on the basis of the measured conductivity and the position of the sample in the gap for measurement, wherein the step of measuring the position of the sample comprises a distance-measuring operation which is performed in a contactless manner, by means of ultrasound, capacitive or optical techniques.

8. (cancelled) ~~The method according to claim 7, wherein the step of measuring the position of the sample comprises a distance-measuring operation which is preferably performed in a contactless manner, in particular by means of ultrasound, capacitive or optical techniques.~~

9. (currently amended) The method according to claim 7, wherein the step of determining the sheet resistance uses a stored mathematical function and comprises a calculation of the sheet resistance relative to the position of the samples in the gap for measurement.

10. (original) The method according to claim 9, comprising the step of using stored coefficients of said function which are specifically determined for the set-up of a device.

11. (currently amended) The method according to claim 7, wherein the step of measuring the position of the sample is performed at least at two locations, preferably adjacent to and in particular at both sides of the location of the measurement of the conductivity.

12. (currently amended) The method according to claim 7, comprising the step of determining the position of at least one of said first and second ~~the two~~ surfaces of a sample.